

# Notice of Allowability

Application No.

09/483,542

Examiner

Fred Ferris

Applicant(s)

ANTUMA, G. DOUGLAS

Art Unit

2128

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3 September 2004.
2. ☒ The allowed claim(s) is/are 19-26.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 11242004.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### DETAILED ACTION

1. *This Office Action is responsive to applicant's amendment filed 3 September 2004. Applicants have cancelled claims 1-18. Amended claims 19-26 are now allowed over the prior art of record.*

### EXAMINER'S AMENDMENT

2. *An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.*

*Authorization for this examiner's amendment was given in a telephone interview with Michael Long on 29 November 2002.*

*In line 9 of claim 19 insert the following text between the word "code" and the word "for":*

*"embodied in the memory subsystem"*

*Line 9 of claim 19 should now read as follows:*

***"volume detailing code embodied in the memory subsystem for causing the processor to perform the steps of:"***

### Response to Arguments

3. *Applicant's arguments filed with the amendment of 3 September 2004 have been fully considered and found to be persuasive.*

Regarding applicant's response to 112(1) rejection: The examiner withdraws the 112(1) written description rejection in view of applicant's amendment to the claims and arguments submitted 3 September 2004.

Regarding applicant's response to 102(b) and 103(a) rejections: The examiner withdraws the 102(b) and 103(a) rejections in view of applicant's amendment to the claims and arguments submitted 3 September 2004.

### **Drawings**

4. Formal drawings are now required in this case since the pending claims have been allowed. The examiner withdraws previous objections to the informal drawings.

### **Allowable Subject Matter**

5. Claims 19-26 are allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

Per independent claim 19: Independent claim 19 includes limitations relating to a system for roof truss volume detailing by providing, positioning, and sectioning three dimensional roof truss volume models and providing an extended component profile if an installed component extends beyond selected points of interest. While these features are individually disclosed in the prior art, the prior art of record does not meet the conditions as suggested in MPEP section 2132, namely:

"The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913,

1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an ***ipsissimis verbis*** test, i.e., identity of terminology is not required. ***In re Bond***, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990)."

In particular, the prior art of record does not disclose features pertaining to the specific sequence of steps leading to sectioning three dimensional roof truss volumes at points of interest and providing a two dimensional roof truss profile that includes a component profile if the three dimensional component extends through the points of interest and subsequently designing roof trusses based on the roof truss profile in the context of the claims.

The closest prior art uncovered during examination discloses the following elements:

U.S. Patent 5,740,341 issued to Oota et al: teaches a CAD system for detailing a **building structure** that allows design and **placement** and routing of **three-dimensional structural components** (including volume) such as piping and air conditioning **ducts** and considers **obstructions** with building structural bodies (trusses etc.) extending through a **point of interest**.

U.S. Patent 5,227,983 issued to Cox et al: teaches teaches a CAD method, system, and computer code, for designing and routing a building **distribution system** (sprinkler system plumbing) consisting of elements (components) representing HVAC **duct work**, piping, conduits, etc. and considers multiple **dimensions, obstructions, and building element** size (volume and segments).

"OSCONCAD: A Model-Based CAD System with Integrated Computer Applications", F. Marir, Itcon, Vol. 3, July 1998 discloses a computer based interactive system for representing CAD construction and architectural design applications consisting of two and three dimensional building elements, shapes, volumes, and allows the visualization of various elements showing sectional views of buildings, related components, and their locations.

While the prior art of record discloses various elements of volume detailing and positioning a representation of a three dimensional component relative to a three dimensional roof truss volume, none explicitly disclose the specific sequence of steps leading to sectioning three dimensional roof truss volumes at points of interest and providing a two dimensional roof truss profile that includes a component profile if the three dimensional component extends through the points of interest and subsequently

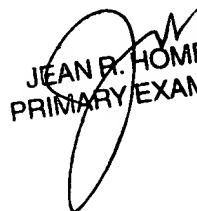
designing roof trusses based on the roof truss profile as now specifically recited in independent claim 19. This feature renders the claimed invention non-obvious over the prior art of record. Claims 20-26 are allowable as being dependent from independent claim 19.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Ferris whose telephone number is 571-272-3778 and whose normal working hours are 8:30am to 5:00pm Monday to Friday. Any inquiry of a general nature relating to the status of this application should be directed to the group receptionist whose telephone number is 571-272-3700. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jean Homere can be reached at 571-272-3780. The Official Fax Number is: (703) 872-9306

*Fred Ferris*, Patent Examiner  
Simulation and Emulation, Art Unit 2128  
U.S. Patent and Trademark Office  
Randolph Building, Room 5D19  
401 Dulany Street  
Alexandria, VA 22313  
Phone: (571-272-3778)  
Fred.Ferris@uspto.gov  
November 24, 2004

  
JEAN R. HOMERE  
PRIMARY EXAMINER